

# SECTION C:

## COGNITIVE PATTERNS

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Intent: The items in this section are intended to determine the patient's attention, orientation, and ability to register and recall new information.

### C0100. Should Brief Interview for Mental Status (C0200-C0500) Be Conducted?

|   |  |
|---|--|
| <b>C0100. Should Brief Interview for Mental Status (C0200-C0500) be conducted? (3-day assessment period)</b><br>Attempt to conduct interview with all patients. |  |
| Enter Code<br><input type="checkbox"/>  | 0. No (patient is rarely/never understood) → Skip to C0900, Memory/Recall Ability<br>1. Yes → Continue to C0200, Repetition of Three Words |

#### Item Rationale

- This information identifies if the interview will be attempted.
- Most patients are able to attempt the Brief Interview for Mental Status (BIMS). The BIMS is a structured cognitive interview.
- A structured cognitive test is more accurate and reliable than observation alone for observing cognitive performance.
  - Without an attempted structured cognitive interview, a patient might be mislabeled based on his or her appearance or assumed diagnosis.
  - Structured interviews will efficiently provide insight into the patient's current condition that will enhance good care.
- Structured cognitive interviews assist in identifying needed supports.

#### Steps for Assessment

1. Determine if the patient is rarely/never understood verbally or in writing. If rarely/never understood, skip to C0900, Memory/Recall Ability.
2. Determine if the patient needs or wants an interpreter. If the patient needs or wants an interpreter, complete the interview with an interpreter.

#### Coding Instructions

*Record whether the cognitive interview should be attempted with the patient.*

- Code 0, no, if the interview should not be attempted because the patient is rarely/never understood, cannot respond verbally or in writing, or an interpreter is needed but not available. Skip to C0900, Memory/Recall Ability.
- Code 1, yes, if the interview should be attempted because the patient is at least sometimes understood verbally or in writing, and if an interpreter is needed, one is available. Proceed to C0200, Repetition of Three Words.

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### Coding Tips

- If the patient needs an interpreter, every effort should be made to have an interpreter present for the BIMS. If it is not possible for a needed interpreter to participate on the day of the interview, code C0100 = 0 to indicate interview not attempted and complete C0900, Staff Assessment of Mental Status, instead of, Brief Interview for Mental Status C0200-C0500.
- Includes patients who use American Sign Language (ASL).

### C0200-C0500: Brief Interview for Mental Status (BIMS)

| Brief Interview for Mental Status (BIMS)             |  |
|--|--|
| <b>C0200. Repetition of Three Words</b>              |  |
| Enter Code<br><input type="checkbox"/>               | <p><b>Ask patient:</b> "I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: <b>sock, blue and bed</b>. Now tell me the three words."</p> <p><b>Number of words repeated by patient after first attempt:</b></p> <p>3. <b>Three</b><br/>           2. <b>Two</b><br/>           1. <b>One</b><br/>           0. <b>None</b></p> <p>After the patient's first attempt say: "I will repeat each of the three words with a cue and ask you about them later: sock, something to wear; blue, a color; bed, a piece of furniture." You may repeat the words up to two more times.</p> |
| <b>C0300. Temporal Orientation: Year, Month, Day</b> |  |
| Enter Code<br><input type="checkbox"/>               | <p><b>A. Ask patient:</b> "Please tell me what year it is right now."</p> <p>Patient's answer is:</p> <p>3. <b>Correct</b><br/>           2. <b>Missed by 1 year</b><br/>           1. <b>Missed by 2 to 5 years</b><br/>           0. <b>Missed by more than 5 years or no answer</b></p>   |
| Enter Code<br><input type="checkbox"/>               | <p><b>B. Ask patient:</b> "What month are we in right now?"</p> <p>Patient's answer is:</p> <p>2. <b>Accurate within 5 days</b><br/>           1. <b>Missed by 6 days to 1 month</b><br/>           0. <b>Missed by more than 1 month or no answer</b></p>   |
| Enter Code<br><input type="checkbox"/>               | <p><b>C. Ask patient:</b> "What day of the week is today?"</p> <p>Patient's answer is:</p> <p>1. <b>Correct</b><br/>           0. <b>Incorrect or no answer</b></p>  |

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| C0400. Recall  |   |
|--|---|
| Enter Code<br><input type="text"/>   | <p><b>Ask patient:</b> "Let's go back to the first question. What were those three words that I asked you to repeat?" If unable to remember a word, give cue (i.e., something to wear; a color; a piece of furniture) for that word.</p> <p><b>A. Recalls "sock?"</b></p> <p>2. Yes, no cue required</p> <p>1. Yes, after cueing ("something to wear")</p> <p>0. No, could not recall</p> |
| Enter Code<br><input type="text"/>   | <p><b>B. Recalls "blue?"</b></p> <p>2. Yes, no cue required</p> <p>1. Yes, after cueing ("a color")</p> <p>0. No, could not recall</p>  |
| Enter Code<br><input type="text"/>   | <p><b>C. Recalls "bed?"</b></p> <p>2. Yes, no cue required</p> <p>1. Yes, after cueing ("a piece of furniture")</p> <p>0. No, could not recall</p>  |
| C0500. BIMS Summary Score  |   |
| Enter Score<br><input type="text"/>  | <p><b>Add scores</b> for questions C0200-C0400 and fill in total score (00-15)</p> <p><b>Enter 99 if the patient was unable to complete the interview</b></p>   |
| C0600. Should the Staff Assessment for Mental Status (C0900) be Conducted? |   |
| Enter Code<br><input type="text"/>   | <p>0. No (patient was able to complete Brief Interview for Mental Status) → <i>Skip to GG0100. Prior Functioning: Everyday Activities</i></p> <p>1. Yes (patient was unable to complete Brief Interview for Mental Status) → <i>Continue to C0900. Memory/Recall Ability</i></p>  |

## Item Rationale

- Direct or performance-based testing of cognitive function decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium.
- Cognitively intact patients may appear to be cognitively impaired because of extreme frailty, hearing impairment, or lack of social interaction.
- Some patients may appear to be more cognitively intact than they actually are.
- When cognitive impairment is incorrectly diagnosed or missed, appropriate communication, worthwhile activities and therapies may not be offered.
- Assessment of a patient's mental state provides a direct understanding of patient function that may:
  - enhance future communication and assistance; and
  - direct nursing interventions to facilitate greater independence such as posting or providing reminders for self-care activities.
- A patient's performance on cognitive tests can be compared over time.
  - An abrupt change in cognitive status may indicate delirium and may be the only indication of a potentially life threatening illness.
  - A decline in mental status may also be associated with a mood disorder.
- Awareness of possible impairment may be important for maintaining a safe environment and providing safe discharge planning.

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### Steps for Assessment: Basic Interview Instructions for BIMS (C0200-C0500)

1. Interview any patient not screened out by item C0100, Should Brief Interview for Mental Status Be Conducted?
2. Conduct the interview in a private setting.
3. Be sure the patient can hear you.
  - Patients with hearing impairment should be tested using their usual communication devices/techniques, as applicable.
  - Try an external assistive device (headphones or hearing amplifier) if you have any doubt about hearing ability.
  - Minimize background noise.
4. Sit so that the patient can see your face. Minimize glare by directing light sources away from the patient's face.
5. Give an introduction before starting the interview.
6. Suggested language: "I would like to ask you some questions. We ask everyone these same questions. This will help us provide you with better care. Some of the questions may seem very easy, while others may be more difficult."
7. If the patient expresses concern that you are testing his or her memory, he or she may be more comfortable if you reply: "We ask these questions of everyone so we can make sure that our care will meet your needs."
8. Directly ask the patient each item in C0200 through C0400 at one sitting and in the order provided.
9. If the patient chooses not to answer a particular item, accept his or her refusal and move on to the next questions. For C0200 through C0400, code refusals as incorrect or could not recall.

### Coding Instructions

*Collect BIMS items only on admission.*

### Coding Tips

- On occasion, the interviewer may not be able to state the items clearly because of an accent or slurred speech. If the interviewer is unable to pronounce any cognitive items clearly, have a different staff member complete the BIMS.
- Nonsensical responses should be coded as zero.
- Rules for stopping the interview before it is complete:
  - Stop the interview after completing (C0300C) "Day of the Week" if:
    1. all responses have been nonsensical (i.e., any response that is unrelated, incomprehensible, or incoherent; not informative with respect to the item being rated), OR

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2. there has been no verbal or written response to any of the questions up to this point, OR
  3. there has been no verbal or written response to some questions up to this point and for all others, the patient has given a nonsensical response.
- If the interview is stopped, do the following:
    1. Code “-” (dash) in C0400A, C0400B, and C0400C.
    2. Code 99 in the summary score in C0500.
    3. Code 1, yes in C0600 Should the Staff Assessment for Mental Status (C0900) be Conducted?
    4. Complete the Staff Assessment for Mental Status.
  - If the patient’s primary method of communication is in written format, the BIMS can be administered in writing. The administration of the BIMS in writing should be limited to this circumstance.

### Examples of Incorrect and Nonsensical Responses

1. Interviewer asks patient to state the year. The patient replies that it is 1935. This answer is incorrect but related to the question.

Coding: This answer is coded 0, incorrect but would NOT be considered a nonsensical response.

Rationale: The answer is wrong, but it is logical and relates to the question.

2. Interviewer asks patient to state the year. The patient says, “Oh what difference does the year make when you’re as old as I am?” The interviewer asks the patient to try to name the year, and the patient shrugs.

Coding: This answer is coded 0, incorrect but would NOT be considered a nonsensical response.

Rationale: The answer is wrong because refusal is considered a wrong answer, but the patient’s comment is logical and clearly relates to the question.

3. Interviewer asks the patient to name the day of the week. Patient answers, “Sylvia, she’s my daughter.”

Coding: The answer is coded 0, incorrect; the response is illogical and nonsensical.

Rationale: The answer is wrong, and the patient’s comment clearly does not relate to the question; it is nonsensical.

#### DEFINITION

#### NONSENSICAL RESPONSE

Any response that is unrelated, incomprehensible, or incoherent; it is not informative with respect to the item being rated.

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### C0200. Repetition of Three Words

| C0200. Repetition of Three Words       |   |
|--|---|
| Enter Code<br><input type="checkbox"/> | <b>Ask patient:</b> "I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: <b>sock, blue and bed</b> . Now tell me the three words."                                     |
|  | <b>Number of words repeated by patient after first attempt:</b><br>3. <b>Three</b><br>2. <b>Two</b><br>1. <b>One</b><br>0. <b>None</b>  |
|  | After the patient's first attempt say: "I will repeat each of the three words with a cue and ask you about them later: sock, something to wear; blue, a color; bed, a piece of furniture." You may repeat the words up to two more times. |

### Item Rationale

- The inability to repeat three words on first attempt may indicate:
  - a memory impairment
  - a hearing impairment,
  - a language barrier, or
  - inattention that may be a sign of delirium.

### Steps for Assessment

*Basic BIMS interview instructions are shown on page C-4 and C-5. In addition, for repetition of three words:*

1. Say to the patient: "I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: sock, blue, and bed." Interviewers need to use the words and related category cues as indicated. If the interview is being conducted with an interpreter present, the interpreter should use the equivalent words and similar, relevant prompts for category cues.
2. Immediately after presenting the three words, say to the patient: "Now please tell me the three words."
3. After the patient's first attempt to repeat the items:
  - If the patient correctly stated all three words, say, "That's right, the words are sock, something to wear; blue, a color; and bed, a piece of furniture" [category cues].
  - Category cues serve as a hint that helps prompt patients' recall ability. Putting words in context stimulates learning and fosters memory of the words that patients will be asked to recall in item C0400, even among patients able to repeat the words immediately.

#### DEFINITION

##### CATEGORY CUE

Phrase that puts a word in context to help with learning and to serve as a hint that helps prompt the patient. The category cue for sock is "something to wear." The category cue for blue is "a color." For bed, the category cue is "a piece of furniture."

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- If the patient recalled two or fewer words, say to the patient: “Let me say the three words again. They are sock, something to wear; blue, a color; and bed, a piece of furniture. Now tell me the three words.” If the patient still does not recall all three words correctly, you may repeat the words and category cues one more time.
- If the patient does not repeat all three words after three attempts, re-assess ability to hear. If the patient can hear, move on to the next question. If he or she is unable to hear, attempt to maximize hearing (alter environment, use hearing amplifier) before proceeding.

### Coding Instructions

*Record the maximum number of words that the patient correctly repeated on the first attempt. This will be any number between 0 and 3.*

- The words may be recalled in any order and in any context. For example, if the words are repeated back in a sentence, they would be counted as repeating the words.
- Do not score the number of repeated words on the second or third attempt. These attempts help with learning the item, but only the number correct on the first attempt go into the total score. Do not record the number of attempts that the patient needed to complete.
- Code 3, three: if the patient repeated all 3 words on the first attempt.
- Code 2, two: if the patient repeated only 2 of the 3 words on the first attempt.
- Code 1, one: if the patient repeated only 1 of the 3 words on the first attempt.
- Code 0, none: if the patient did not repeat any of the 3 words on the first attempt.

### Examples

1. The interviewer says, “The words are sock, blue, and bed. Now please tell me the three words.” The patient replies, “Bed, sock, and blue.” The interviewer repeats the three words with category cues, by saying, “That’s right, the words are sock, something to wear; blue, a color; and bed, a piece of furniture.”

Coding: C0200 Repetition of Three Words would be coded 3, three words correct.  
Rationale: The patient repeated all three items on the first attempt. The order of repetition does not affect the score.

2. The interviewer says, “The words are sock, blue, and bed. Now please tell me the three words.” The patient replies, “Sock, bed, black.” The interviewer repeats the three words plus the category cues, saying, “Let me say the three words again. They are sock, something to wear; blue, a color; and bed, a piece of furniture. Now tell me the three words.” The patient says, “Oh yes, that’s right, sock, blue, bed.”

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Coding: C0200 Repetition of Three Words would be coded 2, two of three words correct.

Rationale: The patient repeated two of the three items on the first attempt. Patients are scored based on the first attempt.

3. The interviewer says, "The words are sock, blue, and bed. Now please tell me the three words." The patient says, "Blue socks belong in the dresser." The interviewer repeats the three words plus the category cues.

Coding: C0200 Repetition of Three Words would be coded 2, two of the three words correct.

Rationale: The patient repeated two of the three items—blue and sock. The patient put the words into a sentence, resulting in the patient repeating two of the three words.

4. The interviewer says, "The words are sock, blue, and bed. Now please tell me the three words." The patient replies, "What were those three words?" The interviewer repeats the three words plus the category cues.

Coding: C0200 Repetition of Three Words would be coded 0, none of the words correct.

Rationale: The patient did not repeat any of the three words after the first time the interviewer said them.

## C0300. Temporal Orientation: Year, Month, Day

| C0300. Temporal Orientation: Year, Month, Day |   |
|---|---|
| Enter Code<br><input type="text"/>            | <b>A. Ask patient:</b> "Please tell me what year it is right now."<br>Patient's answer is:<br>3. <b>Correct</b><br>2. <b>Missed by 1 year</b><br>1. <b>Missed by 2 to 5 years</b><br>0. <b>Missed by more than 5 years or no answer</b> |
| Enter Code<br><input type="text"/>            | <b>B. Ask patient:</b> "What month are we in right now?"<br>Patient's answer is:<br>2. <b>Accurate within 5 days</b><br>1. <b>Missed by 6 days to 1 month</b><br>0. <b>Missed by more than 1 month or no answer</b>                     |
| Enter Code<br><input type="text"/>            | <b>C. Ask patient:</b> "What day of the week is today?"<br>Patient's answer is:<br>1. <b>Correct</b><br>0. <b>Incorrect or no answer</b>  |



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### Item Rationale

- A lack of temporal orientation may lead to decreased communication or participation in activities.
- Not being oriented may be frustrating or frightening.
- If staff know that a patient has a problem with orientation, they can provide reorientation aids and verbal reminders that may reduce anxiety.
- Reorienting those who are disoriented or at risk of disorientation may be useful in treating symptoms of delirium.
- Patients who are not oriented may need further assessment for delirium, especially if this fluctuates or is recent in onset.

#### DEFINITION

##### TEMPORAL ORIENTATION

In general, the ability to place oneself in correct time. For the BIMS, it is the ability to indicate the correct date in current surroundings.

### Steps for Assessment

*Basic BIMS interview instructions are shown on page C-4 and C-5.*

1. Ask the patient each of the 3 questions in Item C0300 separately.
2. Allow the patient up to 30 seconds for each answer and do not provide clues.
3. If the patient specifically asks for clues (e.g., “is it bingo day?”) respond by saying, “I need to know if you can answer this question without any help from me.”

### Coding Instructions for C0300A, Able to Report Correct Year

- Code 3, correct: if the patient states the correct year.
- Code 2, missed by 1 year: if the patient’s answer is incorrect and is within one year from the current year.
- Code 1, missed by 2-5 years: if the patient’s answer is incorrect and is within 2 to 5 years from the current year.
- Code 0, missed by >5 years or no answer: if the patient’s answer is incorrect and is greater than 5 years from the current year or the patient chooses not to answer the item.

### Examples

1. The date of interview is May 5, 2016. The patient, responding to the statement, “Please tell me what year it is right now,” states that it is 2016.

Coding: C0300A would be coded 3, correct.

Rationale: 2016 is the current year.

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2. The date of interview is June 16, 2016. The patient, responding to the statement, “Please tell me what year it is right now,” states that it is 2012.

Coding: C0300A would be coded 1, missed by 2-5 years.

Rationale: 2012 is within 2 to 5 years of 2016.

3. The date of interview is January 10, 2016. The patient, responding to the statement, “Please tell me what year it is right now,” states that it is 1916.

Coding: C0300A would be coded 0, missed by more than 5 years.

Rationale: Even though the ’16 part of the year would be correct, 1916 is more than 5 years from 2016.

4. The date of interview is April 1, 2016. The patient, responding to the statement, “Please tell me what year it is right now,” states that it is “’16.” The interviewer asks, “Can you tell me the full year?” The patient still responds “’16,” and the interviewer asks again, “Can you tell me the full year, for example, nineteen-eighty-two.” The patient states, “2016.”

Coding: C0300A would be coded 3, correct.

Rationale: Even though ’16 is partially correct, the only correct answer is the exact year. The patient must state “2016,” not “’16” or “1816” or “1916.”

### Coding Instructions for C0300B, Able to Report Correct Month

*Count the current day as day 1 when determining whether the response was accurate within 5 days or missed by 6 days to 1 month.*

- Code 2, accurate within 5 days: if the patient’s answer is accurate within 5 days, count current date as day 1.
- Code 1, missed by 6 days to 1 month: if the patient’s answer is accurate within 6 days to 1 month.
- Code 0, missed by >1 month or no answer: if the patient’s answer is incorrect by more than 1 month or if the patient chooses not to answer the item.

### Coding Tips

- In most instances, it will be immediately obvious which code to select. In some cases, you may need to write the patient’s response in the margin and go back later to count days if you are unsure whether the date given is within 5 days.

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### Examples

1. The date of interview is June 25, 2016. The patient, responding to the question, “What month are we in right now?” states that it is June.

Coding: C0300B would be coded 2, accurate within 5 days.

Rationale: The patient correctly stated the month.

2. The date of interview is June 28, 2016. The patient, responding to the question, “What month are we in right now?” states that it is July.

Coding: C0300B would be coded 2, accurate within 5 days.

Rationale: The patient correctly stated the month within 5 days, even though the correct month is June. June 28th (day 1) + 4 more days is July 2nd, so July is within 5 days of the interview.

3. The date of interview is June 25, 2016. The patient, responding to the question, “What month are we in right now?” states that it is July.

Coding: C0300B would be coded 1, missed by 6 days to 1 month.

Rationale: The patient missed the correct month by six days. June 25th (day 1) + 5 more days = June 30th. Therefore, the patient’s answer is incorrect within 6 days to 1 month.

4. The date of interview is June 30, 2016. The patient, responding to the question, “What month are we in right now?” states that it is August.

Coding: C0300B would be coded 0, missed by more than 1 month.

Rationale: The patient missed the month by more than 1 month.

5. The date of interview is June 2, 2016. The patient, responding to the question, “What month are we in right now?” states that it is May.

Coding: C0300B would be coded 2, accurate within 5 days.

Rationale: June 2 minus 5 days = May 29th. The patient correctly stated the month within 5 days even though the current month is June.

### Coding Instructions for C0300C, Able to Report Correct Day of the Week

- Code 1, correct: if the answer is correct.
- Code 0, incorrect, or no answer: if the answer is incorrect or the patient chooses not to answer the item.

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### Examples

1. The day of interview is Monday, June 27, 2016. The interviewer asks: “What day of the week is it today?” The patient responds, “It’s Monday.”  
Coding: C0300C would be coded 1, correct.  
Rationale: The patient correctly stated the day of the week.
2. The day of interview is Monday, June 27, 2016. The patient, responding to the question, “What day of the week is it today?” states, “Tuesday.”  
Coding: C0300C would be coded 0, incorrect.  
Rationale: The patient incorrectly stated the day of the week.
3. The day of interview is Monday, June 27, 2016. The patient, responding to the question, “What day of the week is it today?” states, “Today is a good day.”  
Coding: C0300C would be coded 0, incorrect.  
Rationale: The patient did not answer the question correctly.

### C0400. Recall

| C0400. Recall                          |  |
|--|--|
| Enter Code<br><input type="checkbox"/> | <b>Ask patient:</b> “Let’s go back to the first question. What were those three words that I asked you to repeat?” If unable to remember a word, give cue (i.e., something to wear; a color; a piece of furniture) for that word.<br><b>A. Recalls “sock?”</b><br>2. Yes, no cue required<br>1. Yes, after cueing (“something to wear”)<br>0. No, could not recall |
| Enter Code<br><input type="checkbox"/> | <b>B. Recalls “blue?”</b><br>2. Yes, no cue required<br>1. Yes, after cueing (“a color”)<br>0. No, could not recall  |
| Enter Code<br><input type="checkbox"/> | <b>C. Recalls “bed?”</b><br>2. Yes, no cue required<br>1. Yes, after cueing (“a piece of furniture”)<br>0. No, could not recall  |

### Item Rationale

- Many persons with cognitive impairment can be helped to recall if provided cues.
- Providing memory cues can help maximize individual function and decrease frustration for those patients who respond.

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### Steps for Assessment

*Basic BIMS interview instructions are shown on page C-4 and C-5.*

1. Ask the patient the following: “Let’s go back to an earlier question. What were those three words that I asked you to repeat?”
2. Allow up to 5 seconds for spontaneous recall of each word.
3. For any word that is not correctly recalled after 5 seconds, provide a category cue (refer to “Steps for Assessment,” pages C-7 for the definition of category cue). Category cues should be used only after the patient is unable to recall one or more of the three words.
4. Allow up to 5 seconds after category cueing for each missed word to be recalled.

### Coding Instructions

*For each of the three words the patient is asked to remember:*

- Code 2, yes, no cue required: if the patient correctly remembers the word spontaneously without cueing.
- Code 1, yes, after cueing: if the patient requires the category cue to remember the word.
- Code 0, no—could not recall: if the patient cannot recall the word even after being given the category cue or if the patient responds with a nonsensical answer or chooses not to answer the item.

### Coding Tips

- If on the first try (without cueing), the patient names multiple items in a category, one of which is correct, they should be coded as correct for that item.
- If, however, the interviewer gives the patient the cue and the patient then names multiple items in that category, the item is coded as could not recall, even if the correct item was in the list.

### Examples

1. The patient is asked to recall the three words that were initially presented. The patient chooses not to answer the question and states, “I’m tired, and I don’t want to do this anymore.”

Coding: C0400A-C0400C would be coded 0, no—could not recall, could not recall for each of the three words.

Rationale: Choosing not to answer a question often indicates an inability to answer the question, so refusals are coded 0, no—could not recall. This is the most accurate way to score cognitive function, even though, on occasion, patients might choose not to answer for other reasons.

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2. The patient is asked to recall the three words. The patient replies, “Socks, shoes, and bed.” The examiner then cues, “One word was a color.” The patient says, “Oh, the shoes were blue.”

Coding: C0400A, sock, would be coded 2, yes, no cue required.

Rationale: The patient’s initial response to the question included “sock.” He is given credit for this response, even though he also listed another item in that category (shoes), because he was answering the initial question, without cueing.

Coding: C0400B, blue, would be coded 1, yes, after cueing.

Rationale: The patient did not recall spontaneously, but did recall after the category cue was given. Responses that include the word in a sentence are acceptable.

Coding: C0400C, bed, would be coded 2, yes, no cue required.

Rationale: The patient independently recalled the item on the first attempt.

3. The patient is asked to recall the three words. The patient answers, “I don’t remember.” The assessor then says, “One word was something to wear.” The patient says, “Clothes.” The assessor then says, “OK, one word was a color.” The patient says, “Blue.” The assessor then says, “OK, the last word was a piece of furniture.” The patient says, “Couch.”

Coding: C0400A, sock, would be coded 0, no—could not recall.

Rationale: The patient did not recall the item, even with a cue.

Coding: C0400B, blue, would be coded 1, yes, after cueing.

Rationale: The patient did recall after being given the cue.

Coding: C0400C, bed, would be coded 0, no—could not recall.

Rationale: The patient did not recall the item, even with a cue.

## C0500. BIMS Summary Score

| C0500. BIMS Summary Score |  |
|---------------------------|--|
| Enter Score               | Add scores for questions C0200-C0400 and fill in total score (00-15)<br>Enter 99 if the patient was unable to complete the interview |
| <input type="text"/>      |  |

### Item Rationale

- The total score:
  - Allows comparison with future and past performance.
  - Decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium.
  - Provides staff with a more reliable estimate of patient function and allows staff interactions with patients that are based on more accurate impressions about patient ability.
- The BIMS is a brief screener that aids in detecting cognitive impairment. It does not assess all possible aspects of cognitive impairment. The final determination of the level

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of impairment should be made by the patient's physician or mental health care specialist; however, these practitioners can be provided specific BIMS results and the following guidance:

The BIMS total score is highly correlated with Mini-Mental State Exam (MMSE; Folstein, Folstein, & McHugh, 1975) scores. Scores from a carefully conducted BIMS assessment where patients can hear all questions and the patient is not delirious suggest the following distributions:

13-15: cognitively intact  
8-12: moderately impaired  
0-7: severe impairment

- Abrupt changes in cognitive status (as indicative of a delirium) often signal an underlying potentially life threatening illness and a change in cognition may be the only indication of an underlying problem.

### Steps for Assessment

*After completing C0200-C0400:*

1. Add up the values for all questions from C0200 through C0400.
2. Do not add up the score while you are interviewing the patient. Instead, focus your full attention on the interview.

### Coding Instructions

Enter the total score as a two-digit number. The total possible BIMS score ranges from 00 to 15.

- If the patient chooses not to answer a specific question(s), that question is coded as incorrect and the item(s) counts in the total score. If, however, the patient chooses not to answer four or more items, then the interview is coded as incomplete and a staff assessment (item C0900 Memory/Recall Ability) is completed.
- To be considered a completed interview, the patient had to attempt and provide relevant answers to at least four of the questions included in C0200-C0400. To be relevant, a response only has to be related to the question (logical); it does not have to be correct. See general coding tips on page C-5 for patients who choose not to participate at all.
- Code 99, unable to complete interview: if (a) the patient chooses not to participate in the BIMS, (b) if four or more items were coded 0 because the patient chose not to answer or gave a nonsensical response, or (c) if any of the BIMS items is coded with a "-" (dash).
  - Note: a zero score does not mean the BIMS was incomplete. To be incomplete, a patient had to choose not to answer or give completely unrelated, nonsensical responses to four or more items.

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### Coding Tips

- Occasionally, a patient can communicate but chooses not to participate in the BIMS and therefore does not attempt any of the items in the section. This would be considered an incomplete interview; enter code 99 for C0500, **Summary Score**, and complete the staff assessment of mental status.

### Example

- The patient's scores on items C0200-C0400 were as follows:

|                        |   |
|------------------------|---|
| C0200 (repetition)     | 3 |
| C0300A (year)          | 2 |
| C0300B (month)         | 2 |
| C0300C (day)           | 1 |
| C0400A (recall "sock") | 2 |
| C0400B (recall "blue") | 2 |
| C0400C (recall "bed")  | 0 |

Coding: C0500 would be coded 12.

### C0600. Should the Staff Assessment for Mental Status (C0900) be Conducted?

| C0600. Should the Staff Assessment for Mental Status (C0900) be Conducted? |  |
|--|--|
| Enter Code<br><input type="checkbox"/>                                     | <p>0. No (patient was able to complete Brief Interview for Mental Status) → Skip to GG0100. Prior Functioning: Everyday Activities</p> <p>1. Yes (patient was unable to complete Brief Interview for Mental Status) → Continue to C0900. Memory/Recall Ability</p> |

### Item Rationale

- Direct or performance-based testing of cognitive function using the BIMS is preferred as it decreases the chance of incorrect labeling of cognitive ability and improves detection of delirium. However, a minority of patients are unable or unwilling to participate in the BIMS.
- Mental status can vary among persons unable to communicate or who do not complete the interview.
  - Therefore, report of observed behavior is needed for persons unable to complete the BIMS interview.
  - When cognitive impairment is incorrectly diagnosed or missed, appropriate communication, activities, and therapies may not be offered.
- Abrupt changes in cognitive status (as indicative of delirium) often signal an underlying potentially life-threatening illness and a change in cognition may be the only indication of an underlying problem.



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- This remains true for persons who are unable to communicate or to complete the BIMS.

### Steps for Assessment

1. Review whether Summary Score item (C0500), is coded 99, unable to complete interview.

### Coding Instructions

- Code 0, no: if the BIMS was completed and scored between 00 and 15. Skip to GG0100. Prior Functioning: Everyday Activities.
- Code 1, yes: if the patient chooses not to participate in the BIMS or if four or more items were coded 0 because the patient chose not to answer or gave a nonsensical response. Continue to C0900. Memory/Recall Ability. Note: C0500 should be coded 99.

### Coding Tips

- If a patient is scored 00 on C0500, BIMS Summary Score, C0900, Memory/Recall Ability, should not be completed. 00 is a legitimate value for C0500 and indicates that the interview was complete. To have an incomplete interview, a patient had to choose not to answer or had to give completely unrelated, nonsensical responses to four or more BIMS items.

### C0900. Memory/Recall Ability

| C0900. Memory/Recall Ability                             |  |
|--|--|
| ↓ Check all that the patient was normally able to recall |  |
| <input type="checkbox"/>                                 | A. Current season                                |
| <input type="checkbox"/>                                 | B. Location of own room                          |
| <input type="checkbox"/>                                 | C. Staff names and faces                         |
| <input type="checkbox"/>                                 | E. That he or she is in a hospital/hospital unit |
| <input type="checkbox"/>                                 | Z. None of the above were recalled               |

### Item Rationale

- An observed “memory/recall problem” with these items may indicate:
  - cognitive impairment and the need for additional support with reminders to support increased independence; or
  - delirium, if this represents a change from the patient’s baseline.

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### Steps for Assessment

1. Ask the patient about each item. For example, “What is the current season? Is it fall, winter, spring, or summer?” “What is the name of this place?” If the patient is not in his or her room, ask, “Will you show me to your room?” Observe the patient’s ability to find the way.
2. For patients with limited communication skills, in order to determine the most representative level of function, ask direct care staff across all shifts and family or significant other about recall ability.
  - Ask whether the patient gave indications of recalling these subjects or recognizing them during the assessment period.
3. Observations should be made by staff across all shifts and departments and others with close contact with the patient.
4. Review the medical record for indications of the patient’s recall of these subjects during the assessment period.

### Coding Instructions

*For each item that the patient recalls, check the corresponding answer box. If the patient recalls none, check none of above.*

- Check C0900A, Current season: if patient is able to identify the current season (e.g., correctly refers to weather for the time of year, legal holidays, religious celebrations).
- Check C0900B, Location of own room: if patient is able to locate and recognize own room. It is not necessary for the patient to know the room number, but he or she should be able to find the way to the room.
- Check C0900C, Staff names and faces: if patient is able to distinguish staff members from family members, strangers, visitors, and other patients. It is not necessary for the patient to know the staff member’s name, but he or she should recognize that the person is a staff member and not the patient’s son or daughter, etc.
- Check C0900E, That he or she is in a hospital/hospital unit: if patient is able to determine that he or she is currently in a hospital/hospital unit. To check this item, it is not necessary that the patient be able to state the name of the hospital, but he or she should be able to refer to the hospital by a term such as a “hospital” or “rehabilitation center” or “where I am getting therapy.”
- Check C0900Z, None of above was recalled.